

## United States District Court, Northern District of Illinois

Name of Assigned Judge or Magistrate Judge	Robert W. Gettleman	Sitting Judge If Other than Assigned Judge	
CASE NUMBER	01 C 62	DATE	July 20, 2004
CASE TITLE	AD-II Engineering, Inc. V SRAM Corp.		

[In the following box (a) indicate the party filing the motion, e.g., plaintiff, defendant, 3rd party plaintiff, and (b) state briefly the nature of the motion being presented.]

## MOTION:

## DOCKET ENTRY:

- (1) ☐ Filed motion of [ use listing in "Motion" box above.]
- (2) ☐ Brief in support of motion due \_\_\_\_\_.
- (3) ☐ Answer brief to motion due \_\_\_\_\_. Reply to answer brief due \_\_\_\_\_.
- (4) ☐ Ruling/Hearing on \_\_\_\_\_ set for \_\_\_\_\_ at \_\_\_\_\_.
- (5) ☒ Status hearing set for 8/3/04, at 9:00 a.m.
- (6) ☐ Pretrial conference[held/continued to] [set for/re-set for] on \_\_\_\_\_ set for \_\_\_\_\_ at \_\_\_\_\_.
- (7) ☐ Trial[set for/re-set for] on \_\_\_\_\_ at \_\_\_\_\_.
- (8) ☐ [Bench/Jury trial] [Hearing] held/continued to \_\_\_\_\_ at \_\_\_\_\_.
- (9) ☐ This case is dismissed [with/without] prejudice and without costs[by/agreement/pursuant to]  
☐ FRCP4(m) ☐ General Rule 21 ☐ FRCP41(a)(1) ☐ FRCP41(a)(2).
- (10) ☒ [Other docket entry]

Memorandum opinion and order entered. Accordingly, SRAM's motion for summary judgment of infringement is granted and AD-II's motion to amend is denied.

- (11) ☒ [For further detail see order attached to the original minute order.]

<input type="checkbox"/>	No notices required, advised in open court.	U.S. DISTRICT COURT CLERK 2004 JUL 20 PM 4:04 Date/time received in Central Clerk's Office	number of notices	Document Number 52
<input type="checkbox"/>	No notices required.		JUL 21 2004 date docketed	
X	Notices mailed by judge's staff.		788 docketing deputy initials	
<input type="checkbox"/>	Notified counsel by telephone.			
<input type="checkbox"/>	Docketing to mail notices.			
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GDS	courtroom deputy's initials		mailing deputy initials	

IN THE UNITED STATES DISTRICT COURT  
FOR THE NORTHERN DISTRICT OF ILLINOIS  
EASTERN DIVISION

SRAM CORPORATION,

Plaintiff,

v.

AD-II ENGINEERING, INC.,

Defendant.

No. 00 C 6675

Judge Robert W. Gettleman

AD-II ENGINEERING, INC.,

Plaintiff,

v.

SRAM CORPORATION,

Defendant.

No. 01 C 0062

**DOCKETED**  
JUL 21 2004

**MEMORANDUM OPINION AND ORDER**

In these consolidated cases, SRAM Corporation sued defendant AD-II Engineering, Inc., for infringement of two patents: No. 5,662,000 (the "'000 patent") and U.S. Patent Reexamination Certificate B 1 4,900,291 (the "reexamined '291 patent"). AD-II sued SRAM for a declaration of non-infringement, tortious interference with prospective business relations, unfair competition and violation of the Lanham Act, and violations of the Illinois Uniform Deceptive Trade Practices Act, and Illinois common law. On July 28, 2002, the parties entered into a Stipulation for entry of final judgment and dismissal of claims ("Stipulation") relating to the reexamined '291 patent based upon a ruling in SunRace Roots Enterprise Co., Ltd. v. SRAM

Corp., Case No. C00-03217VRW(N.D. Ca. 2001), narrowly construing the term “shift actuator” as used in Claim 16 of the reexamined ‘291 patent as “a mechanism for controlling the changing of gears that contains a cam configured with a series of lobes and volleys that rotates so as to engage a cam follower.”

Because it is undisputed that AD-II’s devices in question do not contain a cam and thus do not infringe under that construction, the parties entered into the Stipulation dismissing the claims based on the reexamined ‘291 patent while SRAM pursued its appeal in SunRace. Under that Stipulation, SRAM reserved the right to refile its claims against AD-II within 60 days following the issuance of the Federal Circuit’s mandate in SunRace “if the Federal Circuit construes the relevant terms of the reexamined ‘291 patent and no issues of claim construction remain for the district court.”

On July 17, 2003, the Federal Circuit reversed the district court in SunRace, and construed the term “shift actuator” in the ‘291 patent to mean “a mechanism that controls the changing of gears.” SunRace Root Enterprises Co., Ltd. v. SRAM Corp., 336 F.3d 1298, 1302, 1307-08 (Fed. Cir. 2003). Consistent with the terms of the Stipulation, SRAM has refiled its claim that AD-II’s devices infringe Claim 16 of the reexamined ‘291 patent. SRAM thereafter moved for partial summary judgment of infringement of Claim 16. AD-II contested, arguing first that SRAM’s refiling of its claim was premature under the terms of the Stipulation, second that once properly construed Claim 16 must be limited to the apparatus disclosed in the specifications or it is invalid, and third that there are material issues of fact as to when and how AD-II’s shifters take up “lost motion” and whether the shifters have the “control cable means” required by Claim 16.

After SRAM's summary judgment motion was fully briefed, AD-II moved to amend its pleading, seeking to add a defense of invalidity of the '291 patent for failure to meet the written description requirement of 35 U.S.C. § 12 ¶1. The court stayed ruling on the summary judgment motion until AD-II's motion to amend was fully briefed. Both motions are now fully briefed and, for the reasons set forth below, SRAM's motion for summary judgment is granted and AD-II's motion to amend is denied.

### **DISCUSSION<sup>1</sup>**

#### **I. SRAM's Motion for Summary Judgment**

SRAM has moved for summary judgment of infringement on Claim 16 of its reexamined '291 patent. The '291 patent "contains both method and apparatus claims related to gear-shifting on multi-speed bicycles through the use of a shift actuator that is designed to effect precise control over the movement of the derailleur." SunRace, 336 F.3d at 1299. The apparatus claims include the limitation of a "hand grip shift actuator cam means" or a "hand grip shift actuator indexing cam means." Id. The method claims of the reexamined '291 patent, including Claim 16, make no reference to a cam. Id.

Claim 16, as found in the reexamined '291 patent, provides:

In a bicycle derailleur gear shifting system having a rear derailleur shifting mechanism, a shift actuator rotatably mounted on a bicycle handle bar generally coaxially of the handlebar, said shift actuator being mounted on and engaged over an outside of the handle bar inboard of a fixed hand grip on an end of the handlebar, and control cable means operatively connecting said actuator to said shifting mechanism, a method of performing down-shifting events from a

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<sup>1</sup>A discussion of the history of the litigation between SRAM and AD-II and a description of the devices and patents in question can be found in this court's opinion granting summary judgment of infringement to SRAM on its '000 patent. SRAM Corp. v. AD-II Engineering, Inc., 252 F. Supp.2d 712 (N.D. Ill. 2003).

relatively smaller origin free wheel sprocket to a relatively larger destination free wheel sprocket, which comprises:

First rotating said shift actuator a sufficient amount to take up substantially all of the cumulative lost motion in said derailleur mechanism and said cable means; and then rotating said shift actuator a further amount so as to move the bicycle chain at least substantially the distance between the centers of said origin and destination sprocket.

SRAM argues that the undisputed facts demonstrate that the AD-II devices infringe all elements of Claim 16, when the term “shift actuator” is given its ordinary meaning as required by SunRace, 336 F.3d at 1307-08.

As an initial matter, AD-II argues that SRAM’s refile of the claims based on the reexamined ‘291 patent is premature under the terms of the Stipulation. AD-II is wrong. Paragraph 8 of the Stipulation provides that if the Federal Circuit “does not affirm the claim construction” in SunRace, then SRAM may elect to refile its claim with respect to the reexamined ‘291 patent within 60 days of any of the following events:

(a) if the Federal Circuit remands an issue or issues of claim construction to the district court and the SunRace litigation resumes as a result of that ruling, then SRAM may elect to refile its claim against AD-II after the district court in the resumed SunRace litigation construes the relevant claims of the reexamined ‘291 patent;

...

(c) if the Federal Circuit construes the relevant terms of the reexamined ‘291 patent and no issues of claim construction remain for the district court, then SRAM may elect to refile its claim against AD-II within 60 days following the issuance of the Federal Circuit’s mandate in conjunction with that appeal.

AD-II argues that SunRace simply reversed the district court’s construction of the term “shift actuator,” and then remanded for the district court to construe the term anew, therefore triggering subsection (a) of paragraph 8 of the Stipulation. That position is incorrect. The

SunRace court reversed the district court's construction and held that "the ordinary meaning of the term shift actuator controls . . ." SunRace, 336 F.3d at 1307-08. The district court had already held, and the parties had agreed, that the ordinary meaning of the term shift actuator is "a mechanism that controls the changing of gears." Id. at 1301-02. It was that definition that the Federal Circuit determined should apply. Id. at 1307-08. The court then remanded to the district court for proceedings consistent with its opinion, meaning that the district court should continue the case with the term shift actuator construed as a mechanism that controls the changing of gears. Therefore, subparagraph (c) of the Stipulation applies, and SRAM's refiling is timely.

Next, AD-II argues that despite the plain wording of Claim 16 and the Federal Circuit's opinion in SunRace, any construction of the claim that is not limited to the particular cam mechanism disclosed in the specification's description of the preferred embodiment renders the claim invalid for two reasons: (1) the claim fails to meet the enablement requirement of § 112, ¶ 1; or (2) the claim must be construed as a step-plus-function claim under § 112, ¶ 6, which would incorporate the cam mechanism, or would be invalid as reading on prior art. AD-II is wrong on both arguments.

35 U.S.C. § 112, ¶ 1 dictates that a patent specification shall contain:

a written description of the invention, and of the manner and process of making it and using it, in such clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is mostly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

This paragraph contains three separate requirements: (1) the written description requirement; (2) the enablement requirement; and (3) the best mode requirement. AD-II's first argument focuses on the enablement requirement. Specifically, AD-II argues that because the

SunRace court “recognize[d] that the written description does not explicitly address the claim method,” instead focusing “exclusively on the gear shifting systems themselves,” 336 F.3d at 1315, unless the method claimed in Claim 16 is limited to the operation of the apparatus disclosed in the specification, claim is invalid under § 112, ¶ 1 because the method is not enabled by the specification.

This argument was raised and rejected by the Federal Circuit in SunRace. “[N]othing in the written description indicates that the invention is exclusively directed toward cams or suggests that systems not employing cams are outside the scope of the invention. Thus, while it is clear that the patentee was primarily focused on an embodiment of his invention using a cam, nothing in the patent limits the claim to that embodiment.” Id. At 1305. Therefore, it is clear that the Federal Circuit regarded the written description as sufficient to satisfy ¶1. The written description provides sufficient detail so that one skilled in the art can make and use the invention. It need not do more. An applicant is not required to describe every possible future embodiment of his invention. Id. At 1305; Rexnord Corp. v. Laitram Corp., 274 F.3d 1336, 1344 (Fed. Cir. 2001).

Next, AD-II argues that if Claim 16 is construed to read on all shifters, including those without cams, the claim is invalid as reading on some unspecified prior art. Therefore, AD-II asserts, because claims must be construed to preserve their validity, either the “cable control means” of Claim 16 requires the use of special cable connecting to a cam as described in the specification, or the entire claim must be construed as a step-plus-function claim under 35 U.S.C. § 112, ¶ 6.

This argument fails on a number of accounts. First, AD-II fails to identify a single prior art reference that it contends invalidates Claim 16. As SRAM notes, at least 90 prior art references were considered during the reexamination process, and the patent examiner determined Amended Claim 16 to be valid over all of them. Additionally, the Federal Circuit reviewed the prosecution history and explained why Claim 16 was valid over the prior art, without any cam mechanism requirement. SunRace, 336 F.3d at 1300-01.

Moreover, Claim 16 cannot be considered a step-plus-function claim pursuant to § 112, ¶ 6. Even the case on which AD-II relies, O.I. Corp. v. Tekmar Co., 115 F.3d 1576, 1582-83 (Fed. Cir. 1997), fails to support its argument. 35 U.S.C. § 112 ¶ 6 provides that:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of the structure, material or acts in support thereof, and such claims shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

In discussing the meaning of this paragraph, and the terms used therein, O.I. Corp. states (id. (emphasis in original)), that:

the word 'means' clearly the refers to the generic description of an apparatus element, and the implementation of such a concept is obviously by structure or material. We interpret the term 'steps' to refer to the generic description of elements of a process, and the term 'acts' to refer to the implementation of such steps. This interpretation is consistent with the established correlation between means and structure. In this paragraph, structure and material go with means, acts go with steps. Of course, as we have indicated, § 112, ¶ 6, is implicated only when means plus function without definite structure are present, and that is similarly true with respect to steps, that the paragraph is implicated only when steps plus function without acts are present.

In the instant case, as AD-II's own brief (p. 11) admits, "steps plus function with acts are present." Claim 16 describes the steps: (1) taking up substantially all of the cumulative lost motion; and (2) moving the bicycle chain at least substantially the distance between the centers



of said origin and destination sprockets. Claim 16 also describes the acts taken to implement the steps: (1) rotating the shift actuator a sufficient amount to take up substantially all of the cumulative lost motion; and (2) rotating the shift actuator a further amount so as to move the bicycle chain. Because the claim contains step plus function with acts, § 112, ¶ 6 is not implicated. Id.

Finally, AD-II argues that even if Claim 16 is construed broadly as the Federal Circuit has required in SunRace, summary judgment of infringement is inappropriate because there remains a question of fact as to whether AD-II's shifters take up "substantially all of the cumulative lost motion" in the cable control means and derailleur in step 1. Unfortunately for AD-II, its own expert, SRAM's expert, and AD-II Fed. R. Civ. P. 30(b)(6) deponent have all indicated that AD-II devices performed the method described in step 1, albeit without a cam. Accordingly, because AD-II's devices satisfy all elements of Claim 16 on the reexamined '291 patent, SRAM's motion for summary judgment of infringement is granted.

## II. AD-II's Motion to Amend

After SRAM moved for summary judgment, AD-II moved to amend its pleadings to add a defense that the '291 patent was invalid for failure to comply with the written description requirement of § 112, ¶ 1. AD-II's excuse for seeking leave at such late date is that it "believed that its pending defense of invalidity for failure to satisfy the enablement requirement encompassed the written description defense, based on prior Federal Circuit authority indicating that the purpose of the written description is to provide enabling disclosures. AD-II argues that the Federal Circuit's recent opinion in University of Rochester v. G.D. Searle & Co., Inc., 358

F.3d 916 (Fed. Cir. 2004), for the first time, strongly suggests that each defense must be pleaded separately.

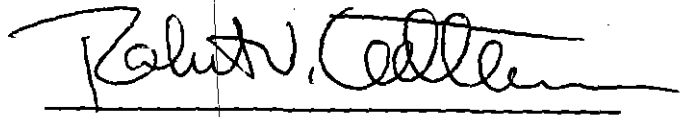
Once again, AD-II's reading of the relevant case law is incorrect. University of Rochester clearly states that, "in addition, and most significantly, our precedent clearly recognizes a separate [from the enablement and best mode] written description requirement." Id. at 922. Indeed, when discussing the three requirements of § 112, ¶ 1, the court, citing In re Alton, 76 F.3d 1168, 1172 (Fed. Cir. 1996), noted that although there is often significant overlap between the three requirements, they are nonetheless independent of each other. Id. at 921. Moreover, as University of Rochester makes clear, the Supreme Court in 2002 had acknowledge the written description requirement as distinct not only from the best mode requirement, but also from enablement. Id. (citing Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co., 535 U.S. 722, 736 (2002)). Thus, University of Rochester lends no support for AD-II's mistaken belief that its enablement defense encompassed its written description defense, and provides no justification for its failure to raise the defense in its initial pleadings.

Finally, leave to amend should be denied where, as here, the amendment would be futile. See Foman v. Davis, 371 U.S. 178, 182 (1962). As noted, the Federal Circuit in SunRace reviewed the written description and found nothing lacking. Indeed, the Federal Circuit firmly and specifically rejected the notion that the '291 patent is limited to a shifter using cams -- the very proposition AD-II seeks to advance in the instant case. SunRace, 336 F.3d at 1305. Accordingly, AD-II's motion to amend is denied.

**CONCLUSION**

For the reasons set forth above, SRAM's motion for summary judgment of infringement is granted and AD-II's motion to amend is denied. This matter is set for a report on status on August 3, 2004, at 9:00 a.m.

**ENTER:      July 20, 2004**

A handwritten signature in black ink, appearing to read "Robert W. Gettleman", written over a horizontal line.

**Robert W. Gettleman**  
**United States District Judge**